JUNE 2002

AMANNEE

U.S. Treasury Secretary visits Ghana

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Treasury Secretary Paul H. O'Neill Remarks at the La Palm Royal Hotel Accra, Ghana

Good afternoon. Thank you for welcoming me to Ghana, and thanks to the American Chamber of Commerce for hosting today's lunch.

This tour marks my first visit to Africa since becoming Secretary of the United States Treasury. In my previous visits I traveled as a businessperson. I am eager to make the most of my time, to witness first hand the efforts underway to engage all the people of Africa in creating a brighter future.

I come here to learn. To hear from entrepreneurs, investors, farmers, artisans and vendors in the market. I want to hear their hopes and dreams and I hope they share with me their insights into how best to eliminate the obstacles to Africa's prosperity.

I come here with an open mind, convinced of only one thing — that human beings everywhere have the potential to succeed.

The question for us, and for our time, is how to finally realize that vision. How can the people of the African nations and their elected leaders create prosperity — and how can the people of the United States and the other industrialized countries best support their efforts?

If I had the answer, I would have sent a prescription. It's not so easy. For some 50 years, thoughtful, compassionate people have struggled to solve poverty here. As Bono, my friend and travelling companion, might say we "still haven't found what we're looking for." The results of official development assistance have been disappointing, and many poor countries here have stayed that way, even as others have excelled.

So I have come to Africa. Not to preach, but to listen, and share. I want to see what has worked here, and what has failed. I want to ask how we can do better. I want to learn from Ghana's political and economic success, so I can share the best of your experience with your neighbors and the world. At the same time, I want to share what we have learned from other successful developing countries around the world, and show our commitment to promoting those practices in Africa.

And I want to take our combined experience and put it to work, to produce results for Africans. Not in the next generation, but right now.

Here is what we know: all people are created equal. Given the tools and incentives for success, they will succeed, no matter who they are or where they live. Of course this is self-evident. But I have also seen this truth first-hand, as a leader in the private sector. As Chairman and CEO of Alcoa, I helped grow the company from 55,000 employees in 13 countries when I joined in 1987, to 140,000 people in 36 countries — including several African countries — when I retired in 2000.

Secretary O'Neill delivering his remarks. With him include (from right), U.S. Ambassador to Ghana Nancy Powell; Hon. Yaw Osafo-Maafo, Minister of Finance and Economic planning, and Hon. J.H. Mensah, Minister and Chairman of Government Economic Team, Ms. Victoria Cooper, President, American Chamber of Commerce.

During that time I learned about job creation, and about the ways of life and work around the globe. In my travels, I saw that human beings everywhere, with the proper education, good health, and a stable environment, could perform meaningful, value-adding work at world-competitive levels. I saw that in the Americas, I saw it in Europe, I saw it in Asia, and I saw it in Africa.

We also know that in every nation, economic growth and higher living standards come from increasing productivity — that is, increasing the value that each worker produces each day. When productivity is rising, workers earn more for their work and their quality of life improves, year after year.

Moreover, we know that it is a competitive private sector that drives productivity gains. As companies compete with each other for business, they seek better ways to satisfy their customers. They try to provide more and more value for each dollar. As opportunities to add value emerge, entrepreneurs enter the market. To stay competitive, leaders must constantly invest in new ideas and better methods for production.

So what can a country do to unleash its private sector and increase productivity? What have successful leaders done?

They rule justly, by fairly enforcing law and contracts, respecting human rights and property rights, and fighting corruption.

They encourage economic freedom, by removing barriers to trade – both internal and external – and by opening their economies to investment, allowing companies and entrepreneurs to compete without excessive interference, and pursuing sound fiscal and monetary policies, including government divestment of business operations.

And they invest in their people, by providing the best possible systems for education and health care. In particular, we must work to fight the spread of AIDS, which threatens to cripple the economic potential of many African nations and peoples.

All three of these elements — ruling justly, encouraging economic freedom, and investing in people — are essential for successful development.

Ghana is a leader in Africa, and nothing better demonstrates that leadership than

last year's peaceful transfer of power following a democratic election. Respect for democracy is one aspect of ruling justly. But that peaceful transition was not only a political achievement, it was an economic achievement.

Here is why: capital is a coward. Investors know there are great opportunities for growth in Africa. The very fact that development in Africa has lagged compared to many parts of the world means that there is enormous potential for high returns as you catch up to the leaders.

Investors are slow to put their capital into Africa because they are afraid that the buildings and machines and businesses their capital will help build could be confiscated through corruption, or through a violent change in power. They fear their contracts will not be respected.

I am not only talking about foreign investors. I am talking about Africans investing in Africa. When savings and investments are not perceived as safe, people hide their cash where it cannot work for the economy, or they send it to countries where they know it will be safe. According to one study, 40% of Africa's private wealth is held abroad. Local entrepreneurs cannot flourish when they fear that corrupt officials may appropriate their success.

With its growing history of democracy and stability, Ghana is showing that it can offer continuous rule of law, even with a change in power. At the same time, Ghana has been opening its economy to international trade and investment, and continuing with the economic reform process started under previous governments.

Already, investors and entrepreneurs are responding to Ghana's improved stability and economic reforms. For example, this morning I visited a successful investment in Ghana, called Affiliated Computer Services, Inc.-Business Process Solutions (ACS-BPS). ACS sells data processing services to insurance companies in the U.S. It opened its office here in 2000, and already it employs over 800 Ghanaians, paying an average of three times the average wage in Ghana. The company now plans to expand its operations to four new sites in Ghana and to increase its workforce to over 1000 people.

The employees start with a high school diploma and typing skills. The training they receive creates a new knowledge base on which future employers can build. As foreign investments like ACS/BPS show success, others are bound to follow, and I am optimistic that increasingly advanced services, such as software development, will thrive in Ghana.

While foreign direct investment creates notice, building a new office and creating a lot of new jobs at one time, it isn't the silver bullet or magic solution for creating self-sustaining economic growth. Local entrepreneurs — not foreigners — are the backbone of every economy. That is true in the United States and around the world. Individuals with roots in the community are willing to take risks to improve the lives of their families and communities, and they pass on their skills and spark the imaginations of future entrepreneurs.

Later today, I will meet with several small businesses that are performing value-added processing for agricultural products, such as making cashew butter. Tomorrow, I'll travel to the northern region of Tamale, where I will visit Wamali, a village which produces, among other crops, shea nut butter. The processing of shea nuts holds great potential for small and large scale agri-business, as shea nut is a good moisturizer used in cosemetics.

Small and medium-sized agricultural and business ventures like these can make a big difference for Ghanaian communities and the overall economy. With the right kind of support, such as investments in rural roads and reform of the land tenure system, the government could encourage further innovation, and help producers get their goods to the market.

As a framework for these economic development policies, I believe Ghana should pursue investment grade rating for its sovereign debt. The transparency and policy environment needed for an investment grade rating, and the rating itself, disciplines government. Achieving investment grade sovereign debt would allow Ghana to grow on its many merits, as investors could more easily differentiate Ghana's risks from those of less progressive nations.

When the sovereign leader is working to improve conditions for investment and entrepreneurship, outside assistance can speed progress.

In February of this year, with U.S. support, the World Bank and the IMF approved Ghana for debt relief under the enhanced Heavily Indebted Poor Countries, or "HIPC," initiative. Ghana now benefits from debt service relief from official creditors. As Ghana's debt burden is reduced, it will have greater resources to invest in health, education and fiscal stability.

As we forgive debt, we must also take steps to avoid recreating the debt burdens that stifled so many nations. President Bush has proposed that up to 50% of the World Bank and other development bank funds for the poorest countries be provided as grants rather than as loans. This proposal makes a lot of sense. It acknowledges the long-term development challenges facing these countries, their vulnerability to economic shocks, and the reality that investments in crucial social sectors such as education and health care — investments in people – while critically important, may not generate the revenue needed to service new debt. Grants, rather than loans, will eliminate the need for governments to tax their people in order to repay the principal and interest – and thereby eliminate the next generation of debt servicing problems for the poorest nations.

Treasury Secretary O'Neill at a hands-on demonstration of specific development projects being carried out by USAID and Peace Corps with small and medium enterprises in Ghana.

We in the US have also taken steps to bolster economic growth in Africa. In the year 2000, we adopted the Africa Growth and Opportunity Act, or "AGOA," to open markets in the United States to exports from sub-Saharan Africa. Later today, I will be meeting with some apparel and handicraft producers that are eager to export to the U.S. under AGOA. I would encourage Ghanaian companies to take advantage of AGOA to enter the U.S. market and build their businesses. I would also encourage the nations of Africa to explore opportunities to reduce trade barriers between neighboring nations.

In our meeting this morning, I committed to President Kufuor that the Treasury Department will provide an advisor on domestic debt management in 2002. We are pleased to provide technical assistance whenever we can to support national leaders seeking to improve their internal budgeting and financial systems.

Technical assistance is also a crucial means through which our official development assistance adds support to burgeoning private sector growth. While in Ghana, we will be visiting several small businesses which have received technical assistance through USAID to market their goods, better organize their books and improve their manufacturing processes.

Official development assistance, through USAID, through the World Bank, the African Development Bank or bilaterally, stands a better chance of success when local leaders are already improving the economic framework of the nation.

That is the premise of the President's Millennium Challenge Accounts and the New Compact for Development. The President has proposed $5 billion in additional US bilateral aid annually, channeled to those countries that can use the money effectively. To access the Millennium Challenge Account, developing countries must demonstrate a strong commitment to ruling justly, encouraging economic freedom, and investing in people.

We are in the process of developing the criteria for measuring countries' policies in this area, so we can begin to disburse funds. As part of the process, President Bush has asked us to reach out to the world community, and that is one reason for this tour of Africa.

The plan the President outlined echos the objectives of the New Partnership for African Development (NEPAD), an initiative created by African leaders to promote, among other things, "sound economic management and people-centered development."

We have to be hard-headed and demand results—that is our responsibility to the impoverished people of Africa. If we don't insist on results for the dollars provided by compassionate people all over the developed world, then we are not meeting our responsibility as world leaders to improve the lives of people everywhere.

Since I became Treasury Secretary, I have been determined to reform the way in which the World Bank and the other multilateral development banks do business. They must improve the effectiveness of their assistance. Rather than focusing on inputs, I want them to focus on results. For example, don't tell me how many children you've enrolled in school, or how much you've spent on enrollment programs — tell me how many of the children can read, write and compute at their grade level after six years of schooling. That's what matters – it's the only thing that matters to those children and their future.

President Bush has created new incentives in our development assistance programs to encourage a greater focus on results. He has committed to an 18% increase in funding for the African Development Bank and an 18% increase in funding for IDA, the World Bank's lending program for the poorest nations, so long as those programs can show they are achieving measurable improvements in development.

I believe strongly in development assistance that makes a difference in people's lives.

I am optimistic that our efforts together will produce results in Ghana, and throughout Africa. This is an exciting time for those of us who relish the challenge of unleashing human potential around the world, especially in Africa. We are making progress on many fronts. With the right government policies, we can accelerate the spread of private sector production around the world. We can create vibrant, self-sustaining local economies and a rising standard of living for people everywhere. We can unleash the human potential — and we will not be satisfied with anything less.

Thank you.***

U.S. Secretary of Treasury Paul O'Neill and the Rock Star Bono Visit Ghana

The U.S. Secretary of Treasury Paul O'Neill and the rock star Bono visited Ghana from May 21st – May 22nd on the first leg of their four-nation tour of sub-Saharan Africa. While in Ghana, they met with President Kufuor, visited Affiliated Computer Services-Business Process Solutions (ACS-BPS), a U.S.-based company which provides remote data entry of medical and dental records for insurance companies, toured various African Development Bank funded projects in Jamestown, viewed a display by small and medium entrepreneurs of Ghanaian products for export, and visited the Regional Hospital in Tamale, as well as an Oxfam sponsored project in Wamali.

After a tour of the ACS-BPS facility, which presently employs 900 Ghanaians, mostly women, O'Neill said: "For me, it exemplifies something I've seen before, but it's a pleasure to see it here in Ghana. It proves that people everywhere have the ability, if they're given the training, to do high-quality, meaningful work that pays very well and creates the basis for an ever-better society."

Treasury Secretary O'Neill meets with President Kufuor at the Castle.

Bono said, "Anyone who's interested in investing in Ghana has only to look at these people, the smartest, hardest workers anywhere." The singer added: "I've been asking all the hard questions and getting some good answers. There are some good facilities here provided for the workers."

The investment that has come from the United States in Ghanaian business, as exemplified by this firm, O'Neill said, is "the best testimony to the belief that the government in Ghana is [providing] and will provide stability going forward. And, in a way, this investment and others like it create the basis for government to be more stable because these people are being paid on the order of 10 times the minimum wage here and it demonstrates to people that there is a better life here in Ghana. You don't have to go someplace else to experience a living wage and be able to send your children to better schools."

The democratic elections and peaceful transfer of power last year led to a stable political and economic environment, O'Neill noted, which has greatly enhanced the attraction of Ghana for foreign investors.

Later that day at the Castle, President Kufuor voiced his wish to run a transparent government and to make Ghana a model "for our part of the world" with the support of the United States. " Minister of Economic Planning and Regional Integration Kwesi Nduom said: "We want Ghana to become the Africa economic success story because of our determination to solve the debt crisis. We want the opportunity to build centers of excellence in Ghana." Most important, Nduom said, "We want to have a preferred relationship that leads to a partnership that builds a successful example of work creation in Ghana."

O'Neill responded that transparent government and a strong fiscal policy, as well as the ability to connect with the rest of the world electronically, as demonstrated in the morning visit to ACS-BPS, is deserving of U.S. support and will yield results for Ghana.

Early in the morning of May 22, O'Neill and Bono, were led on a tour of Makola market by Professor Clara Fayorsey who explained the organizational intricacies of the market . Following the visit to Makola market, the two met with NGO leaders who presented a cross-section of development challenges facing Ghana in the areas of democracy, women's rights, legal reform, debt and trade issues, and regional security.

Next stop was Jamestown where the Treasury Secretary and Bono visited three projects funded by the Social Investment Fund, a Ghanaian government fund supported by official development assistance, including funds from the African Development Bank. They began with a walk down an alleyway that was paved over by residents to improve health conditions. The Social Investment Fund, paid for the project. The project cost about $3,000 and is currently benefiting about 1,000 members of the community. Since completion of the project, the incidence of malaria and other disease has decreased significantly.

They also saw a community-designed fish-smoking facility. The screened building has chimneys to direct the smoke away from the surrounding houses and is a major improvement over the open fires that were previously used. The facility is far safer and also results in higher productivity for the women who use it.

The visit to Jamestown ended at the Richard Akwei vocational school where they met students and teachers in leather working, carpentry, sewing, graphic design, and cooking workshops. The project equips Junior Secondary School pupils and school dropouts with employable skills, and helps to develop their interest in technical studies.

Before leaving Ghana, Secretary O'Neill and Bono flew to Tamale to see an Oxfam project in Wamali, a nearby village, and to visit the District Hospital. Women in the village demonstrated their shea nut butter and peanut oil processing techniques. Doctors at the hospital in Tamale outlined the challenges caused by the scarcity of clean water, power outages, and shortage of trained medical personnel. The Secretary presented medical supplies and equipment donated by the U.S. Department of Defense.***

Above: *Treasury Secretary Paul O'Neill presents vocational tools including computers to the Richard Akwei Memorial School, Accra.* ***Below:*** *Mr. O'Neill with rock star Bono, at the Affiliated Computer Services-Business Process Solutions (ACS-BPS).*

AGRICULTURE SECRETARY VENEMAN ON ANTI-HUNGER GOALS

Addresses plenary session of World Food Summit

By Ann M. Veneman, U.S. Secretary of Agriculture

***Rome** — U.S. Secretary of Agriculture Ann Veneman says that the United States will actively engage public and private partners in a global effort to increase agricultural productivity, end famine and improve nutrition in countries devastated by hunger and poverty.*

As part of this anti-hunger effort, she said, the United States will host a ministerial science and technology conference in early 2003 to focus on how developing countries food needs can be met through new food and agricultural technologies.

Veneman made the remarks in Rome in a June 10 plenary address to ministers from some 180 countries attending the World Food Summit: Five Years Later meeting.

She said that as part of the United States' efforts to spur research on boosting production through new technologies, the U.S. Agency for International Development (USAID) is launching a 10-year, $100 million Collaborative Agricultural Biotechnology Initiative.

Ann M. Veneman

The agriculture secretary said the United States will target eliminating disorders caused by vitamin A and iodine deficiencies in general population, and iron and folate deficiencies in women and children by one-third by 2015. It will also devote efforts to reducing stunting in young children and low birth weights. Addressing the food security crisis in southern Africa, Veneman said that the United States is releasing an additional 275,000 metric tons of wheat to be exchanged for equal value in corn beans and vegetable oil through the Bill Emerson Humanitarian Trust. She also noted the $100-million increase Congress recently authorized for the McGovern-Dole school lunch program that provides food for pre-school and school age children.

Veneman said developing countries should begin their fight against hunger by adopting good governance including fair and transparent policies, and the rule of law — actions that will stimulate growth, investment, and trade in the agricultural sector.

*(**Note:** In the text below "billion" equals 1,000 million.)*

Following is the text of Veneman's prepared remarks.

World Food Summit: Five Years Later

Honorable Chairman, Excellencies, Director-General Diouf, Ministers of Agriculture, distinguished delegates, ladies and gentlemen. It is an honor to be here representing President Bush and the United States of America at the World Food Summit: Five Years Later. President Bush views the alleviation of hunger and poverty throughout the world as "a moral imperative" — those are his words. So today, as I did last November at the FAO Conference, I reaffirm the deep and continuing U.S. commitment to the goals of the 1996 World Food Summit.

As part of our response to that Summit, the U.S. government set a domestic goal of reducing hunger at home by half by the year 2010. Through a coordinated effort involving various levels of government, local communities, charities, and businesses, the United States is well on its way to meeting this objective.

Unfortunately, the global picture is far less encouraging, particularly in much of Sub-Saharan Africa, parts of South Asia, and some other regions. The persistence of widespread hunger and malnutrition exacts an enormous cost in terms of human suffering and lost potential. It is clear that all members of the global community - working individually and in partnership - must significantly accelerate and more effectively focus their efforts.

U.S. Proposes Three International Priorities for Halving Hunger

As we meet today, the clock is ticking. We have 12 more years until 2015. The challenges we face include chronic hunger, recurring famines, and serious nutritional deficiencies. To ensure that the objectives of the 1996 World Food Summit will be met, the United States is proposing to focus on three priorities in partnership with other donors and developing countries:

- Reducing hunger by increasing agricultural productivity.
- Ending famine.
- Improving nutrition.

Increasing agricultural productivity is a way to boost both food availability and access in developing countries. Worldwide, some 800 million people are food insecure, and most of these people live in rural areas where food is produced. Improving their ability to produce, both for themselves and for the market, is one of the most immediate steps we can take to reduce hunger. In many of these countries agriculture accounts for a large share of employment and export earnings. Increased agricultural productivity must be part of a growth strategy to reach the rural poor.

Accomplishing this will require, above all, that countries adopt market-based policies that help stimulate, rather than hold back, their farming sectors. The starting point must be good governance and the rule of law. This means fair and transparent policies. It means policies conducive to private initiative, investment, and trade, and a commitment to broad-based economic growth. We have seen encouraging examples of market reform in such nations as Uganda, Ghana, Peru and Vietnam.

Famine is a human tragedy often caused by human actions. It is a severe drain on development resources and should be fully preventable. Better use of early-warning systems, more local capacity for famine prevention and relief, and other actions would help control the sources of famine, shifting the aid focus from crisis response to development. In many cases, democratic systems and conflict prevention are two of the most effective means to reduce the risk of famine.

To improve nutrition, the United States will target its efforts toward eliminating vitamin A and iodine deficiency disorders by 2015; reducing iron and folate deficiencies in women and children by a third during that same period; and reducing stunting in young children and low birth weights. We hope others will work with us to accomplish these tasks. We have the technologies to do this - both longstanding technologies such as fortification and supplementation, and newer ones such as advances in biotechnology to enhance the micro-nutrient content of staple foods.

What the United States Is Doing To Improve Food Security

The United States will work closely with interested partners on each of these three fronts: raising agricultural productivity, ending famine, and improving nutrition. We have a long and proud tradition of investing significantly in domestic and international food security programs. We are building on that tradition, continuing and in many cases expanding projects and activities already underway.

When President Bush proposed a new Compact for Development in March, he said that part of this historic 50-percent increase in our development efforts would be used to "raise harvests where hunger is greatest." We will use these funds in partnership with countries that are, as the President said, "ruling justly, investing in their people, and promoting economic freedoms." Experience shows that these conditions will help ensure that our development investment leads to real, tangible progress in reducing poverty and alleviating hunger.

Bean seeds provided by international donors.
FAO/17657/G. Diana

This partnership is essential because the resources that really drive development come from private sources - domestic and foreign — that are attracted to competitive economies with skilled workers and open, stable, market-based policies. Development assistance can complement and indeed foster these private flows, but cannot substitute for them. It is the combination of policies, private resources, and development assistance that allows nations to grow and prosper, and to achieve food security for their people.

At the same time, we are increasing the emphasis we place on agriculture in our traditional development assistance programs, with funding for agricultural programs increasing more than 20 percent in each of the last two years. Another 25 percent increase is called for in our fiscal year 2003 budget request.

We are the largest contributor to the multilateral lending banks, and we strongly encourage these institutions to significantly increase their efforts to spur agricultural growth, especially where hunger is greatest. We are the leading food aid donor. As we meet today, the United States is the leading donor responding to the complex food security crisis now facing southern Africa.

To reduce the suffering of people in this region who have been devastated by severe drought conditions, the United States is today releasing 275,000 metric tons of wheat to be exchanged for an equal value of corn, beans, and vegetable oil through the Bill Emerson Humanitarian Trust.

While this is just one example of U.S. leadership that is assisting South Africa, worldwide we support a broad range of initiatives in maternal and child health, capacity building, research and exchange, training, debt relief, and promoting property rights, access to finance, and gender equality.

Our pilot global school-feeding program is now providing school meals to some 9 million children in 38 countries across Africa, Asia, Central and South America, and Eastern Europe. We understand very clearly that when children are fed at school, they are more likely to come to school, which means they are better prepared to learn while at school. And, we are beginning to see the positive results. For example, one project in Eritrea is filling empty stomachs and bringing better nutrition and improved attendance to 35,000 school children.

Based on the pilot school feeding initiative, the U.S. Congress recently authorized the McGovern-Dole International Food for Education and Child Nutrition Program and provided an additional $100 million in funding. This is a worthy investment and we encourage other countries to join in this effort that is providing substantial benefits to children in these regions of the world.

The United States also continues to support agricultural research to develop and disseminate technologies that increase production, farm income, and market opportunities. Achieving needed gains in global agricultural productivity and better food distribution will require broader dissemination and adoption of existing and new technologies— from biotechnology and other production technologies to

information, packaging, processing, storage, and transportation technologies. As part of the U.S. effort, the U.S. Agency for International Development is launching a 10-year, $100-million Collaborative Agriculture Biotechnology Initiative to boost research on varieties better suited to growing conditions in developing countries and strengthen the overall safety and environmental regulatory process.

Today, I am inviting ministers from around the world to join me for a science and technology conference early next year to focus on the needs of developing countries in adopting new food and agricultural technologies. During this conference, we will look at the role of partnerships and ways to share the benefits of technology.

Current and emerging technologies have the potential to increase farm yields; improve the nutrient content of foods; deliver inexpensive, edible vaccines; improve distribution; reduce food waste; reduce the use of chemicals; and offer new marketing opportunities and income sources for farmers in such areas as biodegradable plastics and bioenergy products from agriculture. This is the power and promise of science and technology.

In today's world, we cannot talk about food security without also talking about HIV/AIDS. The rampant spread of HIV/AIDS in several developing countries presents a direct threat to food security, resulting in lost family income and lost food production. In Sub-Saharan Africa, more than 7 million people who once planted and harvested food have died of AIDS since 1985. To help counter this crisis, President Bush has designated $500 million for the Global Fund to fight HIV/AIDS and other infectious diseases, and he proposes to spend $1.6 billion next year to combat HIV/AIDS around the world.

Left: *Esther Gachugu one of the demonstration farmers and an early adopter of tissue culture technology. Her family's modest banana plot has been transformed into a profitable enterprise, yielding the equivalent of up to US$300 from a single day's sale of fruit in Niarobi.*

Source: F. Wambugu. 2001. Modifying Africa: How biotechnology can benefit the poor and hungry, a case study from Kenya. Nairobi.

Right: *Tissue culture raises banana yields and incomes in Kenya; as shown by banana bunches in a market stall.*

FAO/18425/P. Cenini

To grow and prosper, developing countries must have markets for their products. We currently import more than $450 billion in products from the developing world each year — over eight times the amount these countries receive in aid from all sources combined. Many of these countries look to the United States as a major market for their food and agricultural products, a key source of export earnings. We imported nearly $4 billion in coffee, cocoa beans, and other bulk agricultural products from developing countries last year; $2.5 billion in semi-processed farm products; more than $7 billion in seafood products; and close to $12 billion in fruits, vegetables, processed grocery products, and other consumer foods.

Trade can - and must - play a central role in addressing the world's food security needs. In today's global economy, open markets and free exchange will do a far better job of getting food to people if governments do not place unnecessary barriers on the trading system. An open food trading system should be our goal.

The starting point should be the WTO [World Trade Organization] agricultural negotiations now underway as part of the Doha Development Agenda. The United States strongly supports an ambitious three-part agenda: eliminating agricultural export subsidies; substantially reducing trade-distorting domestic subsidies and supports; and reducing market access barriers for agricultural products. Developing countries will be among the biggest beneficiaries of this agenda.

We must give particular priority to those staple food commodities that provide the bulk of the nutritional needs of people living in developing countries. Even as the people of the developing world need easy access to these products, farmers in those countries need to be able to sell their products in regional as well as global markets. We will work closely with others in Geneva to ensure that the trading system plays the fullest possible role in enhancing food security for the world's people. This is good trade policy, good development policy, and good food security policy.

Conclusion

We are gathered here in Rome because we share a common commitment to wiping out hunger, improving nutrition, and building a more peaceful, prosperous, and secure world.

As we review the causes and consequences of food insecurity, we recognize that relief from hunger and poor nutrition can be achieved, with benefits shared throughout the global community. Success will be counted in lives saved and lives made better; in healthier children who can look forward to a lifetime of opportunities; and in freer, more equitable, and more productive societies able to lift people out of poverty through initiative, innovation, and economic growth.

Although challenging, these goals are unquestionably attainable - and ones to which the United States is deeply committed. We look forward to working with all of you - our partners - to achieve these objectives. End text.***

AGRICULTURE UNDER SECRETARY PENN DEFENDS FARM BILL

Says criticism is a result of misperception

The United States remains as committed as ever to World Trade Organization (WTO) negotiations on agriculture despite doubts voiced in some countries after Congress passed a new farm bill, U.S. Under Secretary of Agriculture J.B. Penn says.

During a May 22 briefing, he said that the United States intends to demonstrate "vigorous" leadership in these negotiations and continue to advocate strongly free trade in agricultural products.

The Bush administration is determined to see that these negotiations reach a successful conclusion, Penn said, because as a major food exporter the United States has much to gain from expanded market access for its agricultural products.

The under secretary of agriculture said that the farm bill might provide a necessary impetus to negotiations on direct and export subsidies and other trade-distorting practices. A successful completion of the WTO negotiations, he said, would make it easier to restructure domestic farm support programs.

J.B. Penn

Some governments, including that of Australia, have expressed concerns that the farm bill might affect the United States' ability to play a major role in these negotiations.

Reacting to concerns that the bill is not WTO-compliant, Penn said that safeguards included in the bill guarantee that the total cost of the bill would remain within the limits set by the WTO. He also pointed to the fact that the spending ceiling for the United States is much lower than those for Japan and the European Union (EU).

Penn rejected reports that the farm bill boosts subsidies to unprecedented levels. He said that the level of farm support would actually remain fairly constant over the life of two successive farm bills, one passed in 1996 and another approved in May 2002.

But some non-U.S. officials and media have argued that the new support for U.S. farmers would encourage overproduction in the United States that, in turn, would depress world food prices hurting mostly developing economies dependant on agricultural exports.

Penn said that these concerns are mostly unfounded. He said that initial estimates indicate that major changes in acreage and crops structure related to new programs are unlikely, and higher yields resulting from these programs would be only marginal.

Following is the transcript of Penn's briefing:

The Farm Security and Rural Investment Act of 2002 has been a long time in the making. This farm bill, as they are commonly called, has been under development for about 2 1/2 years. It's been the subject of numerous congressional hearings, exhaustive analysis and extensive debate, as you well know.

The bill was signed into law by President Bush on May 13, and since that time, there has been substantial commentary, especially in the foreign press. My purpose here today is to provide information and help increase understanding of the new law. Also, I hope to perhaps provide some additional perspectives on that law from my vantage point. As Peter indicated, I'd like to make a few overview comments, and then I would be pleased to try to respond to any questions that you might have.

First, a little overview on the legislation itself: The new farm law is very far-reaching in its scope, highly complex in its structure. Many changes were made to the existing program, and several new programs were added.

Now as it concerns domestic support for agricultural producers, the key features are that it continues direct payments that are based on historical plantings and yields. It creates a new system of counter-cyclical payments based on market prices in relation to pre-specified target prices. It revises and re-balances the so-called loan rate in the Marketing Loan Program for major grains and oil seeds. It adds new payment programs for dairy, honey, wool, mohair and pulses, which includes dry beans, lentils and chickpeas. It makes significant changes to the peanut program for the first time since the 1930s.

And most notably, I think, it expands conservation funding significantly and adds new programs to preserve wetlands and improve soil and water quality on working farms.

But these are the parts of the farm bill that are related to, as I indicated, domestic support and conservation. The new law has 10 titles in all and it affects virtually every program, virtually everything we do at the U.S. Department of Agriculture. All of our areas at the department now are very busily assessing the numerous other provisions in the bill and preparing to implement them in a most expeditious manner. It covers domestic food assistance, such as the food stamp program, school lunch. It covers research, rural development, all of the marketing and regulatory functions, and energy, among other areas. The farm bill also made minor changes in the U.S. food aid programs, reflecting many of the proposals that the administration had made and submitted to the Congress in the president's budget for fiscal year 2003. The farm bill reauthorizes the three government programs involved in food aid: PL 480; Food for Progress; and 416(b). These are all reauthorized through 2007. It increases the minimum tonnage in the basic humanitarian program to 2.5 million tons, a pretty substantial increase over the previous 2.025 million tons. And this action, we think, solidifies the U.S. government position as the leading provider of food aid in the world. We routinely provide more than half of all the food aid provided in the world. And this bill mandates a $100 million next fiscal year for a global school feeding program.

The bill also increases funds for some of our market-promotion activities, the Market Access Program, as it's known, the Foreign Market Development Program, but importantly, the bill does not change any tariffs or any import quantity commitment.

Now, this new law, as I indicated, has attracted very considerable international attention. I say attention; some people might even say criticism. And much of the commentary has focused on the connection between the new law and our WTO obligation, and the connection between the new law and how it might affect the commitment of this administration in the current WTO negotiation. So I want to address both of these points directly.

First of all, let me address the funding levels in the new law. There is a perception that this new law represents a very considerable increase in spending for our farm sector and that it will violate our WTO obligation. The new law changes annual funding very little from what it's been over the past four years. Congress augmented the previous farm bill, the 1996 FAIR Act, by approving $30.5 billion in total over the past four years, or about $7.5 billion annually, and this new law increases spending $73.5 billion over the next 10 years.

So that's about $7.4 billion. So the new law has an increase in it that is almost identical to the increased funding that we've had over the past four years. So the bottom line is that the new law does not increase funding substantially over what the Congress has been spending on the farm sector over the past four years.

There's also a perception that the support level in the new law exceeds our WTO obligations. This, of course, simply is not true. The message of the new farm law is simply that we will support our farmers fully while maintaining our WTO obligations.

And I want to emphasize that the U.S. domestic support ceiling, the amount allowable under the WTO, is relatively low. Our ceiling is $19.1 billion — $19.1 billion — and that is compared to $31 billion for Japan and $62 billion for the European Union. So the European Union has a ceiling that is three times that of the United States. The Japanese ceiling is fully 50 percent higher than our ceiling. So our ceiling is relatively low. We have the funding levels for the new bill, but they will not violate the $19.1 billion ceiling.

Now the estimated cost of the new farm bill is $170 billion over the next 10 years. That's an average of $17 billion a year. A less conservative estimate would put the cost of the new bill at $190 billion over the next 10 years. That's an average of $19 billion a year.

So the point that I want to make is that $19 billion is the average amount. Our ceiling is $19.1 billion. And much of this $19 billion is unarguably green box. There's $5.2 billion each year that is in so-called decoupled direct payments. Those are green box. So it seems to me that just by simple arithmetic, you can see that there is virtually no way that we're going to exceed the $19.1 billion allowable ceiling.

And in addition, there is a lot of increased spending — a lot of that annual average of $19 billion that is for conservation, for research, for rural development — all of these are green- box programs.

Well, now if that is not convincing enough, there is an added failsafe mechanism in the law itself that ensures that the WTO limit will not be exceeded. The law mandates the Secretary of Agriculture to use so-called circuit breakers to ensure that we don't exceed the limit. And as we implement this bill, we're going to put in place a process so that we can have ongoing monitoring of the spending and also early-warning alerts that would allow us ample time to take appropriate action.

Now the other point I want to make — I want to emphasize is related to the farm bill and our commitment to the Doha negotiations. There has been considerable speculation about how the administration views the Doha negotiations after passage of the farm bill. And let me emphasize that our resolve to obtain further trade liberalization has not weakened. We are as committed as ever to a successful conclusion to this round. You can fully expect the United States to exert vigorous leadership, to be actively involved in the negotiations and to be a strong advocate throughout the round for liberalized trade in food and agricultural products.

The administration, U.S. farm groups, the food industry, and key members of Congress involved in agricultural matters are strongly committed to continued significant reductions in global agricultural trade-distorting measures and policies.

Now, the reason that this industry is so keen on liberalized trade is that trade is so important to the economic future of the food and agricultural industry. We are a food surplus exporting country, and ever-greater market access is absolutely critical to the long-term economic health of our industry. We have a very abundant natural resource base. We have an accommodating climate. Our agricultural producers have made very substantial investment in the sector, and they've adopted a long stream of new technologies that have enabled us to produce far, far more than we can consume here at home. We export a very large proportion of our major crops — some of those covered by this law, such as wheat, cotton, rice, corn and soybeans. And a high proportion of our exports are high-value products, are processed products. In fact, two-thirds now by value of all of our exports are high-value or processed products.

We export the output from one of every three acres; 25 percent of every dollar of gross income comes from exports. So you can see that this industry has to be committed to further liberalization of trade in food and agricultural products.

If anything, the farm bill provides even greater impetus for our negotiators to reach a successful conclusion, especially as it relates to market access. As you all know, there are three pillars to the Doha negotiation. The one is export subsidies. And the U.S. is not a big user of export subsidies. In fact, the European Union is responsible for 90 percent of all of the export subsidies that are used in the world today; they use 25 times the amount that the United States does. In the area of market access, that's where we're looking to have

substantial progress, and a successful round in that area would greatly facilitate any required modifications in the third pillar, domestic supports.

Our markets are already relatively open. The global — the average global tariff for food and agricultural products around the world are 62 percent — all countries included. Japan, the average is 59 percent; the Cairns Group, 30 percent; the European Union, 30 percent; and in the United States, a very modest 12 percent. So I say again, our markets are already relatively open. So we have much to gain here for the benefit of our producers, and a positive outcome would make a very persuasive case to modify our domestic supports.

Finally, many observers have said that this bill will significantly stimulate production and further depress global commodity prices.

I would offer a couple of observations in that regard.

First, our total cropland acreage space is about 325 to 330 million acres. We have committed that much to the crops that are covered by the farm bill, and it hasn't changed very much for the past several years. Now in 1996, when we adopted the last farm bill, it enabled producers to have complete planting flexibility, and we saw very significant shifts among crops. We had over time, a very substantial decrease in wheat acreage, from 11 to 12 million acres. We had a very substantial increase in oilseed acreage — especially soybeans, again, on the order of 12 or 13 million acres; and a little expansion in corn acreage. But there are no provisions in this law that would offer the incentive enough to evoke cropping-pattern shifts anywhere near the magnitude that we saw in 1996. So I would not expect to see any perceptible change in the aggregate land base that we now utilize — the 325 million, 330 million acres.

There are sufficient incentives in this farm bill, as there are in every farm bill that we've had in the past, to lead the more aggressive, larger producers to continue to adopt new technologies that will increase yields. So we could expect to see yields continue to grow. But the impact of just expanded yields on total outputs would only be marginal.

Well, I think that summarizes the key points that I wanted to make, so I would be happy to try to respond to questions at this time.

PETER KOVACH: Sir?

QUESTION: My name is Adu-Asare, a reporter for africanewscast.com.

As you correctly noted, there's a lot of criticism about this bill — especially from Africa. The present administration has made trade as a vehicle for assisting Africa's development. Africa is not a manufacturing continent. It is predominantly agricultural. And Africans think some of their products can be exported to the U.S. market, because U.S. imports some amount of food from other places. I can think of pineapples.

Q: Yeah, my question is: If the administration's position is as I have said, to use trade, then the bill here, as we see it, is slamming the market in the face of African products.

PENN: Well, I simply can't understand how you can come to that conclusion. As I said, the actions that are provided for in this bill are fully compliant with our WTO obligations. We're not violating any WTO obligations. We're going to stay well within the ceilings that were negotiated under the Uruguay round of agreements. That's one.

Secondly, this bill does nothing to change market access. It doesn't close any markets. There is a perception that seems to have gone around that this bill is somehow anti-trade. And it doesn't have that impact at all.

Q: I'm Ute Hennig, from Inside U.S. Trade.

I had two quick questions to clarify two points you made. One of them, the suggestion that the outcome of market access negotiations would influence the position on U.S. support: I'm a bit puzzled about that, since most of the countries that have money to buy are, indeed, the major agricultural exporters. So how likely is it that the EU would grant us additional market access, and therefore we would be willing to mitigate U.S. support? And the second one is your key point about how this is complying with the WTO. Do you foresee counting the domestic support in the amber box proper, or under the de minimus exemptions? I hope this is not too trade geeky for you.

A: Well, it's very trade geeky, but I'll give it a shot, okay?

On the first question, you're absolutely right in that our major markets are the European Union, or Europe proper, and Japan. And they are developed countries. We already enjoy substantial access to those markets. We would always like to have more. But the places where we would like to have additional market access are the growth markets around the world. And those growth markets are in the developing countries of Asia, the developing countries of Latin America. So market access in places where we now don't have a very significant market share is absolutely critical, we think, to a successful conclusion to this round.

In response to your second question, I have been talking about the amber box ceiling of $19.1 billion, and we would see some of the programs being in the amber box product-specific, and some being in the amber box non-product-specific. And so we would have to look at the countercyclical, the marketing loan program, parts of the conservation program, parts of the peanut program. We'd have to go program by program. But even so, the point that I'm making is that we're going to be nowhere near violating the ceilings that we have under the WTO regardless of how you classify the program.

Q: (Off mike) — how do you — how do you see the outcome of — I'm wondering if you could elaborate on your point, the outcome of market access talks will influence the U.S. position on continuing domestic support, which is how I understood you to make two — you know, twice — (off mike).

A: Yes. The point I'm making is a very clear one, I think, is that if we can have a successful conclusion to the Doha round, and success to us being measured in considerable increases in market access, then I think it's much easier to restructure the domestic support programs to gain political support for restructuring domestic political support programs. So if anything, the point I was making in my remarks is that it gives us as negotiators added impetus to achieve a successful result in terms of market access.

KOVACH: Yes.

Q: Parasuram, Press Trust of India. Two questions. Supposing you did not have the bill, what will be — what would have been the impact on American agriculture? I mean, is it really devastating or it will be mild?

A second thing is, what will be the impact of this bill on the developing country exports?

A: I didn't understand fully the first part of your question. If we did not have the bill —

Q: If you did not have the bill, how much impact would it have had on American agriculture?

A: On the economic health of American agriculture? Well, I think that one has to look at American agriculture in its entirety now. We have evolved over time to the point that we have 2 million farms today. Our agriculture generates about $200 billion annually. So it's very diverse.

We have the producers that are largely affected by this farm bill, the ones that we focus most on, the traditional crop producers; they account for about $40 billion of the total $200 billion. We have

the livestock sector that accounts for about a $100 billion. And then we have specialty fruit and vegetable crop producers. So it's very difficult to talk about agriculture as a homogenous entity. But I think we were seeing that costs have increased, that land prices have escalated around the country; that the margins for the major crop produ-cers covered by this bill had been squeezed fairly considerably. So I think we would have seen a fairly considerable economic shakeout across farm country, had we not seen a continuation of something on the order of the 1996 Farm Bill, and something perhaps a little more, as occurred in this bill.

And the second question was how does this farm bill affect developing country exports? Well, as I said, this farm bill is focused largely on domestic support for our agricultural producers. And I said that I don't — I can't think of any provisions in the bill that affect our market access. So I don't think that there should be any significant impact on developing country exports. Most of the criticism comes from the allegation that this bill will stimulate additional commodity production; that additional commodity production will depress world prices, and that producers of those commodities, including developing countries, would be disadvantaged.

But I tried to point out in my remarks that some initial analysis suggests that our crop land acreage base is not going to change very perceptively, that there will be some shift among crops. I mean, the soybean loan rate, for instance, is actually reduced in this bill. So that might have some impact on soybean acreage relative to corn acreage, for example, but it will be very marginal, very minor.

So the bottom line answer is I don't think there's very much impact on developing country exports.

Q: Jim Berger from Washington Trade Daily. I guess Australia has been the most vocal to this point on its objections to the bill, threatening even to — already to take us to the WTO. Have any Australian officials been in touch with the United States, or you, informally or formally, to really spell out what their objections are?

A: Well, I was in Australia perhaps a month ago or so, I can't remember exactly, and I had a firsthand opportunity to learn of the Australians' concerns. And they've made their concerns known through their embassy personnel here. We have had direct communications from the trade minister, the minister of agriculture there.

I can't speak for the Australians, so I'm not going to try to enumerate what their particular concerns are, but it's my own impression that their major concern is that this bill in some way will affect the ability of the U.S. to be a strong leader, to be a major player in seeing the Doha round to conclusion. I think as everybody understands, there is a very short time horizon for Doha. We don't have much time to waste. And so if one of the major players should be on the sidelines for a while, that would be a big concern. But we have tried to reassure the officials personally — I'm trying to do that here today — that again, there is no reduction, no lessening of our resolve to be major players and to have a successful outcome.

And I say to the Australians and to the Cairns Group, there comes a point where we need to all focus on the common objective, and the common objective being to get a successful conclusion to this round. After a while, I think it becomes counterproductive to continue to fight among ourselves.

Q: Hi. (Chinese?) TV of Hong Kong. You said access to developing countries is one of the important tasks in the future, but this bill upset China and Mexico and other developing countries. Isn't this doing negative work in your effort? And secondly, I understand maybe the European Union has already filed complaints to the WTO. Is USDA prepared to work with the complaints? What kind of measures you are going to take?

A: Well, we are. But you said that this bill upsets China and upsets Mexico; but as I've tried to explain here, I don't know what the basis of that anxiety might be, because we do support our agricultural producers, but we do it in a way that is clearly legal, clearly within the bounds of the WTO. And as I tried to say, we can support our farmers fully and still stay within the obligations that we have under the WTO.

We want to try to explain that to people. We want to try to get all of our trading partners to understand that. If complaints are filed, we will address those. I mean, we will try to respond in as direct a way as we possibly can. Our objective, again, because we are a surplus-food producer, is to trade. And it would be counterproductive, as you suggest, for us to adopt domestic legislation that is going to prevent us from gaining greater market access and expanding trade.

KOVACH: I promised to have Dr. Penn out of here at 25 of 3:00, so I'm afraid we'll have to call it a day.

Thank you very much, Dr. Penn.

PENN: Thank you, Peter.

Thank you. Thank you, ladies and gentlemen.

End transcript.***

ENSURING SAFE FOOD

By Sally L. McCammon, Science Advisor, Animal and Plant Health Inspection Service, U.S. Department of Agriculture

The U.S. government, with more than 16 years' experience in evaluating biotechnology products, has instituted the most thorough and scientifically based regulatory system anywhere in the world, says Sally McCammon, chief scientist with the U.S. Department of Agriculture's Animal and Plant Health Inspection Service. McCammon outlines the roles played by key U.S. regulatory agencies and their approach to food safety, and to ensuring that the most current scientific information is available to those regulatory bodies before any genetically engineered product is released in the U.S. market.

Few food issues have raised as much interest, particularly internationally, as has the safety of genetically engineered foods. And few foods have been as thoroughly examined, dissected, tested, and regulated. The fact is that genetically modified foods developed in the United States have gone through the most intense regulatory and scientific review that exists anywhere in the world and would not be found in the U.S. marketplace unless regulators were completely convinced about their safety. This article reviews the U.S. regulatory process and the key agencies responsible for the safety of the U.S. food supply and consequently U.S. food exports.

THE U.S. REGULATORY FRAMEWORK

In 1986 the White House issued the Coordinated Framework for the Regulation of Products of Biotechnology proactively establishing a strong commitment by the U.S. government to the safe development of biotechnology products from the laboratory, through field-testing and development, and into the marketplace. Over the last 16 years, the United States has gained considerable experience in evaluating the products of biotechnology for safety. The framework's underlying assumption is that the risks from the products of biotechnology are the same in kind as those of similar products — risks to agriculture, the environment, and human health. Thus, existing U.S. laws and regulations for addressing these risks have been deemed adequate to address any risks posed by products developed using biotechnology, and no new "gene law" has been considered necessary.

To assure safety, the U.S. regulatory structure is based on risk rather than process, and its success is due to the fact that regulatory agencies with established credibility and expertise evaluate these products. Many aspects are evaluated when determining safety. Regulations establish procedures and criteria by which different types of products are evaluated, including those produced using biotechnology, products such as vaccines, plant varieties for food, pesticides, animal products, and pharmaceuticals. Certain products of modern biotechnology can easily be assessed under existing regulations, while other products require new regulations.

The U.S. regulatory agencies that examine plants and plant products intended for use as food are the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA) of the Department of Health and Human Services, and the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture (USDA-APHIS). A new genetically engineered plant could be reviewed by one or all three of these agencies, depending on the plant and trait engineered into it. For instance, a Bacillus thuringiensis Bt gene in a food crop would be reviewed by USDA-APHIS, EPA, and FDA; a plant with modified oil content for food would be reviewed by FDA and USDA-APHIS; and modified flower color in a horticultural crop would be reviewed by USDA-APHIS alone. It can take five years of field-testing, under USDA-APHIS oversight, for the developer of a new plant variety to evaluate the new line and to collect the data needed to pass through the regulatory system. Another two years may be needed for USDA-APHIS, EPA, and/or FDA to complete their reviews. Multiple agencies reviewing the same product from different perspectives provide a comprehensive system for assuring safety.

The United States has built upon its experience using a science-based approach to evaluating other products to evaluate the products of modern biotechnology. Science-based means that the review of the product is done using scientific criteria relevant to that product. The approach is constantly evolving due to new types of products and the availability of new scientific information. Science is the basis by which regulatory officials can assure and build upon credibility, remain current, and assure a rational basis for decision-making. Science and the legal processes are inextricably linked for regulations that evaluate biological products.

THE REGULATORS' ROLES

Under the authority of the Plant Protection Act, USDA-APHIS regulates the development and field-testing of genetically engineered plants, microorganisms, and certain other organisms. USDA-APHIS regulations provide procedures for obtaining permission to release (field test), import into the country, or move interstate within the United States. After several years a developer may petition USDA-APHIS for non-regulated status. The USDA-APHIS review process evaluates agricultural and environmental safety issues. Particular attention is paid to evaluating any changes in agronomic characteristics of the new plant line. Although usually not related to the change intended, such unintended changes could impact food safety as well as agricultural and environmental safety. Fortunately, over 98 percent of these "off-types" are discarded by developers early in the development process. Only the healthiest and well-characterized lines survive the selection in the subsequent development process and are sent to regulators for evaluation.

To date 53 petitions have been granted and almost 8,000 permits and notifications issued for field-testing at almost 30,000 sites. Although no petitions have been denied, 21 have been withdrawn due to insufficient information or other inadequacies in the application.

Under the Federal Food, Drug, and Cosmetic Act (FFDCA), EPA sets tolerance limits for substances used as pesticides on and in food and feed, or establishes an exemption from the requirement of a tolerance if such a tolerance is not necessary to protect the public health (determined after evaluation by the agency). EPA's responsibility is to ensure the safety of pesticides, both chemical and biological, under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) by regulating the distribution, sale, use, and testing of plants and microbes producing pesticidal substances. Both EPA and USDA-APHIS review many transgenic plants for agricultural and environmental effects.

EPA issues experimental use permits for field-testing of "pesticidal" plants and registrations for commercialization of these plants. The Bt toxin, which occurs naturally in soil bacterium, is considered a biological pesticide. For plants containing Bt toxin, the manufacturer must prepare a resistance management plan as a condition for registration with the EPA. The plan describes how the manufacturer registering the plant product will assure that resistance does not build up in affected insect populations and reduce the effectiveness of Bt applied topically or used through the plant's genetics. EPA also evaluates the new use of herbicides on herbicide-tolerant transgenic plants, while USDA-APHIS evaluates the herbicide-tolerant plant.

FDA assesses the food (including animal feed) safety and nutritional aspects of new plant varieties as part of a consultation procedure published in the 1992 Statement of Policy: Foods Derived From New Plant Varieties. FDA expects developers of new plant varieties to consult with the agency on safety and regulatory

questions under the authority of the FFDCA. FDA policy is based on existing food law and requires that genetically engineered foods meet the same rigorous safety standards as are required of all other foods. The FDA biotechnology policy treats substances intentionally added to food through genetic engineering as food additives if they are significantly different in structure, function, or amount from substances currently found in food. Many of the food crops currently being developed using biotechnology do not contain substances that are significantly different from those already in the diet and thus do not require pre-market approval.

Although the FDA system currently is voluntary, every new plant line that is commercialized in the United States has been evaluated by the FDA through this consultation process. In public meetings held in 2000 no concerns with the substance of the FDA review were voiced for those products already reviewed by FDA. In 2001 FD A proposed to make this review mandatory, and it is currently studying the almost 100,000 comments received before finalizing this rule.

The FDA's assessment includes evaluating the composition of major nutrients and levels of toxicants that many plants produce naturally, and determining potential for allergenicity, particularly assessing whether the inserted genes are from allergenic sources. Also evaluated is whether a new method of food preparation must be used as a result of the genetic change, or whether the food is changed so that it is unrecognizable. The food safety issues addressed assess whether the food is safe and wholesome.

If there is any material change to the food, then labeling is required. Labeling of food in the United States must be truthful and not misleading. To provide guidance to developers of food involving genetic engineering, the FDA also provided draft guidance in 2001 on Voluntary Labeling Indicating Whether Foods Have or Have Not Been Developed Using Bioengineering.

Transparency is built into the U.S. system at every step, beginning with the initial passage of laws by Congress, and public input is important to assuring that concerns are addressed. Regulations developed to implement these laws consider all public comments before the regulations are finalized. Public comment is also invited for decision documents such as environmental assessments and future evaluations. Comprehensive field-tests, petition databases, and U.S. regulations and regulatory decisions are accessible at http://www.aphis.usda.gov.

A SCIENCE-BASED REGULATORY APPROACH

Science informs the decision-making process of U.S. regulators at many levels. Regulators evaluating specific products use the available published scientific literature, particularly from peer-reviewed journals. Applicants cite this literature in their applications for regulatory approval. The U.S. National Academy of Sciences (NAS) or other parts of the scientific enterprise may be asked to identify the scientific issues and recommend approaches to evaluating particular types of products. Meetings of scientists can be called to address specific issues, as have past meetings on Bt, viral recombination, and relevant biological factors for evaluating crop plants. Information can even be requested on specific products. The EPA meets with its scientific advisory panels. The FDA refers questions to its Food Advisory Committee. Recently, the NAS reviewed the scientific underpinnings of the regulatory decisions made by USDA. The USDA also has a Risk Assessment Grants Program that specifically funds research on emerging issues with genetically engineered organisms. Regulators use all of this information to assure that the most current approaches and information are available to inform regulatory decisions.

CODEX ALIMENTARIUS

Internationally, the appropriate scientifically based standards, guidelines, and recommendations for evaluating the food safety of transgenic products as they move into the international marketplace are being developed by the representatives of national governments in the ad hoc Intergovernmental Codex Task Force on Foods Derived From Biotechnology under the Codex Alimentarius. The first international Guideline for the Conduct of Food Safety Assessment of Foods Derived from Recombinant-DNA Plants as well as the Principles for the Risk Analysis of Foods Derived from Modern Biotechnology, both currently in draft status, are slated for adoption in 2003 by the Codex Alimentarius Commission. These standards are a milestone in agreement on the approaches to assuring food safety of the products of modern biotechnology. ***

BATTLING HUNGER WITH BIOTECHNOLOGY

By Gregory Conko, Director of Food Safety Policy, Competitive Enterprise Institute, and C.S. Prakash, Professor of Plant Molecular Genetics, Tuskegee University

Needless restrictions on agricultural biotechnology would harm the world's ability to battle hunger in the 21st century, say Gregory Conko and C.S. Prakash, co-founders of the AgBioWorld Foundation. They say that the concerns of anti-biotechnology campaigners simply are not supported by the scores of peer-reviewed scientific reports or data from tens of thousands of field trials.

The AgBioWorld Foundation is a nonprofit organization that provides information to the general public about developments in plant science, biotechnology, and sustainable agriculture.

C.S. Prakash

During the coming decades the world will face the extraordinary challenge of conquering poverty and achieving genuine food security with a very potent new tool: agricultural biotechnology. Skeptics argue that transgenic plants represent a vast new threat to both the environment and human health. However, that view is not supported by the overwhelming weight of scientific evidence that has been generated over the last three decades. Furthermore, such criticism ignores the fact that needless

restrictions on biotechnology could endanger our ability to battle hunger in the 21st century.

Transgenic technology holds the potential to increase food production, reduce the use of synthetic chemical pesticides, and actually make foods safer and healthier. These advances are critical in a world where natural resources are finite and where one-and-a-half billion people suffer from hunger and malnutrition. Already, farmers in the United States, Canada, and elsewhere have benefited from improvements in productivity and reduced use of synthetic pesticides. But the real future of biotechnology lies in addressing the special problems faced by farmers in less developed nations.

Critics like to dismiss such claims as nothing more than corporate public relations puffery. However, while most commercially available biotech plants were designed for farmers in the industrialized world, the increasing adoption of transgenic varieties by developing countries over the past few years has been remarkable. According to the International Service for the Acquisition of Agri-Biotech Applications (ISAAA), farmers in less developed countries now grow nearly one-quarter of the world's transgenic crops on more than 26 million acres (10.7 million hectares), and they do so for many of the same reasons that farmers in industrialized nations do.

PRODUCTIVITY GAINS FROM TRANSGENIC CROPS

Among the most important limiting factors in developing world agricultural productivity is biotic stress from insects, weeds, and plant diseases. Transgenic modifications common in several industrialized nations target these same problems and can be easily transferred into local varieties to help poor farmers in the developing world. For example, South African farmers are already growing transgenic pest-resistant maize, and this year began planting transgenic soy. South African and Chinese farmers have been growing transgenic insect-resistant cotton for several years, and the Indian government approved it for commercial cultivation in the spring of 2002. This transgenic cotton, similar to the varieties so popular in the United States, is expected to boost yields by 30 percent or more for Indian farmers, according to a recent article in the Economic Times. It could even transform India from the world's third largest producer of cotton into the largest.

Globally, transgenic varieties are now grown on more than 109 million acres (44.2 million hectares) in Argentina, Australia, Canada, Chile, China, Mexico, South Africa, and the United States, according to ISAAA. They are even grown on substantial amounts of acreage in Brazil, where no transgenic varieties have yet been approved for commercial cultivation. Farmers there looked across the border and saw how well their Argentine neighbors were doing with transgenic varieties, and smuggling of transgenic soybean seed became rampant. The European Union's (EU) Directorate General for Agriculture estimates that Brazil is now the fifth largest grower of transgenic crops.

MEETING ENVIRONMENTAL GOALS

Although this first generation of crops was designed primarily to improve farming efficiency, the environmental benefits these crops offer are extensive. The U.S. Department of Agriculture found that U.S. farmers growing transgenic pest-resistant cotton, maize, and soy reduced the total volume of insecticides and herbicides they sprayed by more than 8 million pounds per year. Similar reductions have been seen in Canada with transgenic rapeseed, according to the Canola Council of Canada.

In less developed nations where pesticides are typically sprayed on crops by hand, transgenic pest-resistant crops have had even greater benefits. In China, for example, some 400 to 500 cotton farmers die every year from acute pesticide poisoning. A study conducted by researchers at Rutgers University in the United States and the Chinese Academy of Sciences found that adoption of transgenic cotton varieties in China has lowered the amount of pesticides used by more than 75 percent and reduced the number of pesticide poisonings by an equivalent amount. Another study by economists at the University of Reading in Britain found that South African cotton farmers have seen similar benefits.

The reduction in pesticide spraying also means that fewer natural resources are consumed to manufacture and transport the chemicals. Researchers at Auburn University and Louisiana State University in the United States found that, in 2000 alone, U.S. farmers growing transgenic cotton used 2.4 million fewer gallons of fuel, 93 million fewer gallons of water, and were spared some 41,000 10-hour days needed to apply pesticide sprays.

Transgenic herbicide-tolerant crops have promoted the adoption of farming practices that reduce tillage or eliminate it altogether. Low-tillage practices can decrease soil erosion by up to 90 percent compared to conventional cultivation, saving valuable topsoil, improving soil fertility, and dramatically reducing sedimentation in lakes, ponds, and waterways.

The productivity gains generated by transgenic crops provide yet another important environmental benefit: they could save millions of hectares of sensitive wildlife habitat from being converted into farmland. The loss and fragmentation of wildlife habitats caused by agricultural development in regions experiencing the greatest population growth are widely recognized as among the most serious threats to biodiversity. Thus, increasing agricultural productivity is an essential environmental goal, and one that would be much easier in a world where agricultural biotechnology is in widespread use.

Opponents of biotechnology argue that organic farming can reduce pesticide use even more than transgenic crops can. But as much as 40 percent of crop productivity in Africa and Asia and about 20 percent in the industrialized countries of North America and Europe are lost to insect pests, weeds, and plant diseases. Organic production methods would only exacerbate those crop losses. There is no way for organic farming to feed a global population expected to grow to 8 or 9 billion people without having to bring substantially more land into agricultural use.

Fortunately, many transgenic varieties that have been created specifically for use in less developed nations will soon be ready for commercialization. Examples include insect-resistant rice varieties for Asia, virus-resistant sweet potato for Africa, and virus-resistant papaya for Caribbean nations. The next generation of transgenic crops now in research labs around the world is poised to bring even further productivity improvements for the poor soils and harsh climates that are characteristic of impoverished regions.

Scientists have already identified genes for resistance to environmental stresses common in tropical nations, including tolerance to soils with high salinity and to those that are particularly acidic or alkaline. Other transgenic varieties can tolerate temporary drought conditions or extremes of heat and cold.

ENSURING WORLDWIDE FOOD SECURITY

Biotechnology also offers hope of improving the nutritional benefits of many

foods. Among the most well known is the variety called "Golden Rice," genetically enhanced with added beta carotene, which is converted to vitamin A in the human body. Another variety developed by the same research team has elevated levels of digestible iron.

The diet of more than 3 billion people worldwide includes inadequate levels of essential vitamins and minerals, such as vitamin A and iron. Deficiency in just these two micronutrients can result in severe anemia, impaired intellectual development, blindness, and even death. And even though charities and aid agencies such as the United Nations Childrens' Fund and the World Health Organization have made important strides in reducing vitamin A and iron deficiency, success has been fleeting. No permanent effective strategy has yet been devised, but Golden Rice may finally provide one.

Importantly, the Golden Rice project is a prime example of the value of extensive public sector and charitable research activities. The rice's development was funded mainly by the New York-based Rockefeller Foundation, which has promised to make the rice available to poor farmers at little or no cost. It was created by scientists at public universities in Switzerland and Germany with assistance from the Philippines-based International Rice Research Institute (IRRI) and from several multinational corporations.

Golden Rice is not the only example. Scientists at publicly funded, charitable, and corporate research centers are developing such crops as cassava, papaya, and wheat with built-in resistance to common plant viruses; rice that can more efficiently convert sunlight and carbon-dioxide for faster growth; potatoes that produce a vaccine against hepatitis B; bananas that produce a vaccine against cholera; and countless others. One lab at Tuskegee University is enhancing the level of dietary protein in sweet potatoes, a common staple crop in sub-Saharan Africa.

Admittedly, experts recognize that the problem of hunger and malnutrition is not currently caused by a global shortage of food. The primary causes of hunger in recent decades have been political unrest and corrupt governments, poor transportation and infrastructure, and, of course, poverty. All of these problems and more must be addressed if we are to ensure real, worldwide food security. But producing enough for 8 or 9 billion people will require greater yields in the regions where food is needed most, and transgenic crops are good, low-input tools for achieving this.

ELIMINATING NEEDLESS RESTRICTIONS

Although the complexity of biological systems means that some promised benefits of biotechnology are many years away, the biggest threat that hungry populations currently face are restrictive policies stemming from unwarranted public fears. Although most Americans tend to support agricultural biotechnology, many Europeans and Asians have been far more cautious. Anti-biotechnology campaigners in both industrialized and less developed nations are feeding this ambivalence with scare stories that have led to the adoption of restrictive policies. Those fears are simply not supported by the scores of peer-reviewed scientific reports or the data from tens of thousands of individual field trials.

Mankind has been modifying the genetic makeup of plants for thousands of years, often in ways that could have had adverse environmental impacts and that routinely introduced entirely new genes, proteins, and other substances into the food supply. Food-grade tomatoes and potatoes are routinely bred from wild varieties that are toxic to human beings, for example. But plant breeders, biologists, and farmers have identified methods to keep potentially dangerous plants from entering the food chain.

The evidence clearly shows there is no difference between the practices necessary to ensure the safety of transgenic plants and the safety of conventional ones. In fact, because more is known about the genes that are moved in transgenic breeding methods, ensuring the safety of transgenic plants is actually easier. But the public's reticence about transgenic plants has resulted in extensive regulations that require literally thousands of individual safety tests that are often duplicative and largely unnecessary for ensuring environmental protection or consumer safety. In the end, over-cautious rules result in hyperinflated research and development costs and make it harder for poorer countries to share in the benefits of biotechnology.

Perhaps more importantly, restrictions on transgenic plants and onerous labeling requirements for biotech foods have caused many governments to block commercialization - not out of health or environmental concerns but because of a legitimate fear that important European markets could be closed to their exports. As last year's United Nations Development Report acknowledged, opposition by European consumers and very strict legal requirements in European Union member nations have held back the adoption of transgenic crops in underdeveloped nations that need them.

Furthermore, the Cartagena Protocol on Biosafety, adopted in January 2000, will tend to reinforce these counterproductive policies because it permits governments to erect unwarranted restrictions based on the Precautionary Principle, the notion that even hypothetical risks should be enough to keep new products off the market, regardless of their potential benefits. Thus, EU nations can restrict imports of transgenic crops from both industrialized and less developed nations, no matter how much scientific data have been presented showing them to be safe, because opponents can always hypothesize yet another novel risk.

Admittedly, advocates have to take the public's concerns more seriously. Better sharing of information and a more forthright public dialogue are necessary to explain why scientists are confident that transgenic crops are safe. No one argues that we should not proceed with caution, but needless restrictions on agricultural biotechnology could dramatically slow the pace of progress and keep important advances out of the hands of people who need them. This is the tragic side effect of unwarranted concern.

AN IMPORTANT DEVELOPMENT TOOL

Ultimately, biotechnology is more than just a new and useful agricultural tool. It could also be a hugely important instrument of economic development in many poorer regions of the globe. By making agriculture more productive, labor and resources could be freed for use in other areas of economic growth in nations where farming currently occupies 70 or 80 percent of the population. This, in turn, would be an important step in the journey toward genuine food security.

The choice is clear. Innovators must proceed with due caution. But as a report jointly published by the United Kingdom's Royal Society, the National Academies of Science from Brazil, China, India, Mexico, and the United States, and the Third World Academy of Science contends: "It is critical that the potential benefits of [transgenic] technology become available to developing countries." It is also critical that industrialized countries not stand in their way.***

Note: *The opinions expressed in this article do not necessarily reflect the views or policies of the U.S. Department of State.*

TOLL ON AGRICUTURE FROM HIV/AIDS IN SUB-SAHARAN AFRICA

By Shahla Shapouri and Stacey Rosen

Issue. Labor remains an important component of agricultural production in Sub-Saharan Africa because of the limited use of purchased inputs. Since AIDS affects adults in their prime productive years, labor shortages are becoming a major concern in some countries. As the epidemic spreads in rural areas, any changes in availability and productivity of the labor force will directly affect food production—and consumption. Sub-Saharan Africa, with 11 percent of global population, has an estimated 73 percent of global HIV/AIDS-related infections. Little is known about the net effect of AIDS on the agricultural economy, but there is no question that food insecurity will increase in the severely affected countries.

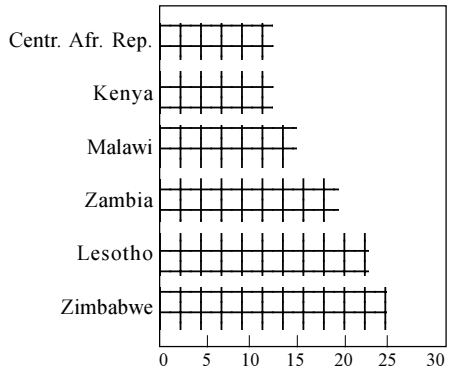
Background. During the last two decades, per capita food consumption declined in the region, and the prospects for improvement are not promising due to limited use of new technologies to boost domestic food production. Sub-Saharan Africa is faced with a decline in population growth rates, not as a natural progression of development, but as a result of the rapid spread of HIV/AIDS. The potential impact of the disease on food production is of major concern because of the region's already low and declining per capita food consumption and low level of agricultural productivity.

Grain market performance profile for selected countries

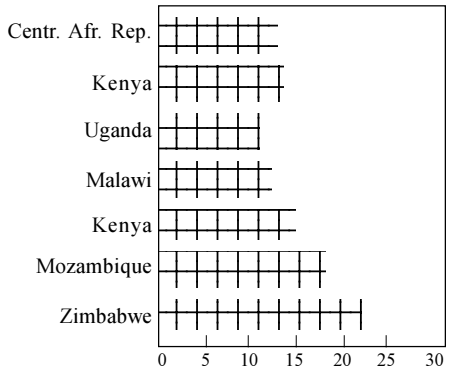
	Annual production growth		2010 ratio of nutritional gap to	
	1980-99	1989-99	Production	Imports
	Percent			
East Africa:				
Kenya	0.44	-1.04	12.12	25.21
Tanzania	2.03	0.00	33.57	353.67
Uganda	2.18	1.29	0.00	0.00
Southern Africa:				
Malawi	1.83	4.14	18.11	213.54
Zambia	-1.22	-3.63	69.91	356.20
Zimbabwe	-1.06	-0. 1	2.41	21.75

Source: ERS/USDA

Adult HIV infection rate



Estimated percentage of labor force lost to AIDS in 2020

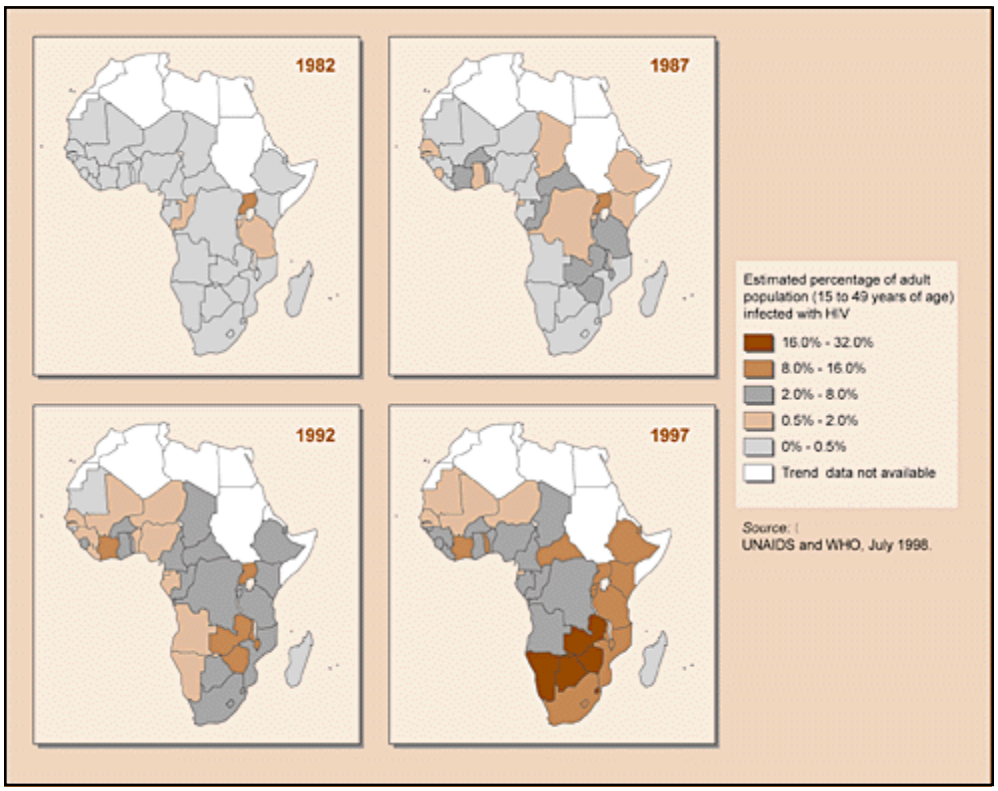


The two most severely affected regions are Southern and Eastern Africa. In Southern Africa, seven countries—Botswana, Lesotho, Namibia, South Africa, Swaziland, Zambia, and Zimbabwe—are reported to have adult HIV prevalence of more than 20 percent. In these countries, life expectancy is projected to decline to 30 to 40 years from 60 to 70 years (the estimate used before the spread of HIV/AIDS). According to a United Nations report, about 55 percent of all HIV infections in Sub-Saharan Africa are among women. Peak HIV prevalence among women occurs at age 25, 10-15 years earlier than for men, thus changing the structure of the population. This also means that the most productive age cohort, 15-45, is dying the fastest from AIDS.

In the most highly affected countries, slow growth in agricultural productivity and the overall economy resulted in growing food insecurity over the last two decades. Even in countries like Uganda where food supplies are projected to be nutritionally adequate, food insecurity remains a major concern of low incomes and a skewed income distribution. The table shows the projected nutritional vulnerability in selected countries highly affected by AIDS. Since limited conventional in-puts are used, labor remains a main component of agricultural production. By reducing the number of farm laborers, the AIDS epidemic could significantly diminish the region's food security.

Our projections of crop production usually assume that the marginal productivity of labor remains constant over the projection period. For the Sub-Saharan countries, this is an overestimation because the decline in population growth is partly due to the spread of AIDS, which affects the most productive segment of the population. To examine the likely impact of the reduction in labor productivity, we reduced the marginal productivity of labor from 0.3 to 0.2 in the Southern African countries. Such a decline, coupled with a reduction in the number of agricultural laborers, will reduce labor productivity by 12 percent per year for the region. As a result of the decline in labor productivity, grain output fell 3.3 percent relative to the base-level projections, causing food gaps to grow. The region's food gap to maintain per capita consumption levels jumped 15 percent, while the nutrition gap rose an estimated 13 percent. In the highly affected areas, productivity losses will likely be higher. The World Health Organization estimates that local losses in agricultural productivity from AIDS at the household or village level range from 10 to 50 percent in about 10 Sub-Saharan African countries.

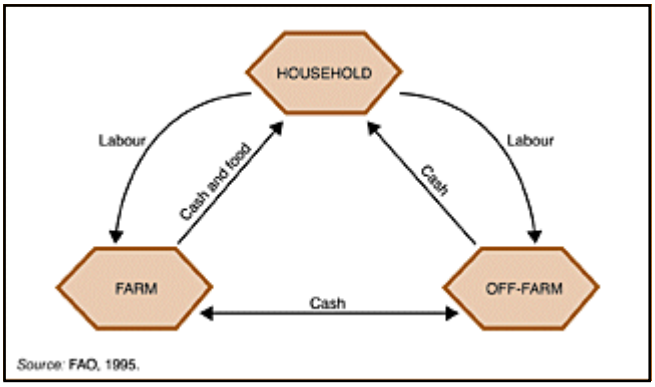
The high rate of infection among women, in particular, will have enormous implications on nutrition and poverty. Many farms are headed by women, and on other farms women provide a large portion



1. Spread of HIV in sub-Sharan Africa, 1982-1997

of total labor. For example, a study of two towns in Tanzania found that women provided 48 percent of agricultural labor, including land preparation, planting, weeding, and harvesting, while men did most of the marketing. Economic consequences will be compounded by the fact that women are barred from owning land in many countries. If a husband dies, the wife's lack of collateral limits her ability to obtain credit to keep the farm in operation or to purchase labor-saving technology. Also, an increase in the number of orphans increases the child-care responsibilities of healthy women in the community who must care for the sick and dying as well. These additional duties compound the negative impact of AIDS on agriculture because these women will have less time for farming activities.

Another factor that can worsen the situation is a labor-induced change in cropping patterns. For example, as the labor supply declines, farmers may move away from labor-intensive export crops to more subsistence crops that use less labor. Among food crops, a switch from corn to cassava would conserve considerable labor. But cassava is less nutritious than corn, and nutritional intake is already below minimum standards in several countries, including the highly affected AIDS countries. In 14 of the 17 countries in East and Southern Africa, per capita daily caloric intake is below the level required to attain a minimum nutritional standard (the calories required to sustain life with minimum activity). The nutritional vulnerability of the countries is projected to grow by 30 percent in the next decade. A domino effect follows: food supply deficits and decreased healthiness lower agricultural productivity through reduced food availability, which further reduces agricultural productivity and may hasten the onset of AIDS in weakened HIV-positive people.



2. A farm household system

Alternatives. There are some success stories in the region. Uganda, for example, has launched major preventive efforts during the last decade and has managed to reduce the rate of infection. Growing awareness by official at the international level has led to an increase by official aid to improve and expand the preventive measures to reduce the rate of infection. This should ease economic as well as health costs and support national programs. Based on success stories in the region, educational messages to prevent the spread of disease, combined with economic assistance to cope with the situation, are the most efficient ways of using new financial resources. To promote self-reliance and more sustainable responses in areas highly affected by HIV, communities can be encouraged to diversify their economic activities. Many communities in Africa have started income-generating activities such as raising poultry or gardening to improve their financial situation and to help families affected by HIV/AIDS. In Malawi and Uganda, village banks give small loans to households to start their own enterprise such as market trading and honey production (USAID, "Impact of HIV," June 2000).***

1 *For every 1-percent decrease (increase) in the supply of labor, producion will decrease (increase) by 0.3 percent.*

INDIA: In 1992, the Ministry of Health and Family Welfare established National AIDS Control Program (NACO), to manage program of HIV/AIDS prevention activites.

CTS AND INTERNET S

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USDA)

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s System
nell.edu

nformation Center
.gov/fnic

nspection Service
sda.gov/index.htm

ultural Service/Food Aid

as.usda.gov/food-aid.html

pection, Packers, and
ds Administration
ww.usda.gov/gipsa/

nal Agricultural Library
/www.nal.usda.gov

S. Department of Health and Human
ervices Food and Drug Administration
Center for Food Safety and Applied
Nutrition
http://www.cfsan.fda.gov/list.html

www.FoodSafety.gov
http://www.foodsafety.gov

U.S. House of Representatives Committee on Agriculture
http://www.agriculture.house.gov

U.S. Senate Committee on Agriculture, Nutrition, and Forestry
http://www.agriculture.senate.gov

ACADEMIC AND RESEARCH ORGANIZATION

AgWeb.com
AgWeb.com is an online news service for farmers, ranchers, and growers.
http://www.agweb.com

American Farm Bureau Federation
The American Farm Bureau Federation is the largest farm organization in the United States with more than 5 million members in the U.S. states and Puerto Rico. Its mission is to undertake programs that will improve the financial well-being and quality of life for farmers and ranchers.
http://www.fb.com

Bread for the World
Bread for the World is a nonpartisan advocacy network on domestic and international hunger issues. Its partner organization, Bread for the World Institute, carries out research and education on the causes of and solutions for hunger.
http://www.bread.org

Center for Agricultural Biotechnology
The Center for Agricultural Biotechnology (CAB) is one of five research centers of the University of Maryland Biotechnology Institute. CAB's mission within the field of agricultural biotechnology is basic and applied research, education and training, and economic development.
http://www.umbi.umd.edu/~cab/

Center for Food and Nutrition Policy
The mission of the center is to advance rational, science-based food and nutrition policy through research, outreach, public service, teaching, and communications. The center conducts seminars and conferences presented globally for corporate executives and senior public policy- makers on issues related to food and nutrition. It also conducts a graduate program that awards master's degrees in public policy.
http://www.ceresnet.org

CropLife America
CropLife America promotes the environmentally sound use of crop protection products for the economical production of safe, high-quality, abundant food, fiber, and other
http://www.croplifeamerica

Food and Agricult
Institute
The Food
Resea
ec

conducted cooperatively by
University's Center for Agricul
Rural Development (CARD) and
University of Missouri-Columbia.
http://www.fapri.org
http://www.missouri.edu
Iowa State University
578 Heady Hall
Ames IA 50011-107

Freeman Center for International Economic Policy
The Freeman Center focuses on global economic issues, monetary issues, the international competitiveness of agriculture, economic integration of the Western Hemisphere, and economic reform.
http://www.hhh.umn.edu/centers/freeman/

Harvard Center for Risk Analysis, Program on Food Safety and Analysis
A main goal of the program is to inform legislators, community leaders, corporate officials, and journalists about the importance of risk analysis in the promotion of a safe food supply.
http://www.hcra.harvard.edu/food.html

National Food Processors Association
The National Food Processors Association (NFPA) represents the U.S. food processing industry on scientific and public policy issues involving food safety, nutrition, technical and regulatory matters and consumer affairs. NFPA members produce processed and packaged fruit, vegetable, and grai
products, meat, poultry, and s
products, snacks, drinks a
provide supplies and
manufacturers.
http://www.n

Codex Alimentarius Commission
The Codex Alimentaris system presents an opportunity for all countries to join the international community in formulating and harmonizing food standards and ensuring their global implementation. It also allows them a role in the development of codes governing hygienic processing practices and recommendations relating to compliance with those standards.
http://www.codexalimentarius.net/

Consultative Group on International Agricultural Research (CGIAR)
The Consultative Group on International Agricultural Research (CGIAR) is an association of public and private members in more than 100 countries. CGIAR was created in 1971 to mobilize cutting-edge science to reduce hunger and poverty, improve human nutrition and health, and protect the environment. CGIAR's research agenda includes the entire range of problems affecting agricultural productivity and links these problems to broader concerns about poverty reduction, sustainable management of natural resources, protection of biodiversity, and rural development.
http://www.cgiar.org

Convention on Biological Diversity
One of the key agreements adopted at the 1992 Earth Summit in Rio de Janeiro was the Convention on Biological Diversity. This pact among the majority of the world's governments sets out commitments for maintaining the world's ecological underpinnings in an environment of economic development. The convention has three main goals: the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits from the use of genetic resources.
http://www.biodiv.org

European Commission Directorate-General for Agriculture
http://www.europa.eu.int/comm/agriculture

Food and Agriculture Organization
The Food and Agriculture Organization of the United Nations, founded in 1945, has a mandate to raise levels of nutrition and standards of living, to improve agricultural productivity, and to better the condition of rural populations. FAO is one of the largest specialized agencies in the United Nations system and the lead agency for agriculture, forestry, fisheries, and rural development. An intergovernmental organization, FAO has 183 member countries plus one member organization, the European Community.
http://www.fao.org

International Food Information Council Foundation (IFIC)
IFIC collects and disseminates scientific information on food safety, nutrition, and health and works with scientific experts and through partnerships to help translate research into understandable and useful information for opinion leaders and ultimately, consumers. IFIC focuses primarily on U.S. issues and participates in an informal network of independent food information organizations in Europe, Asia, Australia, Canada, Japan, and Latin America.
http://www.ific.org/food

International Plant Genetic Resources Institute (IPGRI)
IPGRI is an international research institute with a mandate to advance the conservation and use of genetic diversity for the well-being of present and future generations. It is a center of the Consultative Group on International Agricultural Research (CGIAR).
http://www.ipgri.org

International Rice Research Institute (IRRI)
IRRI is a nonprofit agricultural research and training center established to improve the well-being of farmers and consumers, particularly those with low incomes. It is dedicated to helping farmers in developing countries produce more food on limited land using less water, less labor, and fewer chemical inputs, without harming the environment.
http://www.irri.org

International Service for National Agricultural Research (ISNAR)
Founded in 1979 and headquartered in the Hague, The Netherlands, ISNAR helps developing countries improve their national agricultural research systems and organizations by promoting appropriate agricultural research policies, sustainable research institutions, and improved research management.
http://www.isnar.cgiar.org

Organization for Economic Cooperation and Development (OECD)
Agriculture, Food and Fisheries
OECD is an international organization that helps governments deal with the economic, social, and governance challenges of a globalized economy. It has also worked with governments to support agricultural production by intervening in domestic and international markets. OECD ministers of agriculture support the long-term objective of substantial progressive reductions in support and protection, have adopted a set of shared goals for the agro-food sector, and recognize that OECD's analysis is an essential contribution to the understanding of agricultural policies and their international impacts.
http://www.oecd.org
http://www.oecdwash.org

United Nations Conference on Trade and Development (UNCTAD)
Agricultural Market Access Database (AMAD)
AMAD results from a cooperative effort by Agriculture and AgriFood Canada; the European Commission, Agriculture Directorate-General; the Food and Agriculture Organization of the United Nations; the Organization for Economic Cooperation and Development; the World Bank; the United Nations Conference on Trade and Development; and the U.S. Department of Agriculture, Economic Research Service.
http://www.amad.org

United Nations Conference on Trade and Development (UNCTAD)
Standing Committee on Poverty Alleviation
At UNCTAD VIII, held in Cartagena, Columbia, in 1992, a Standing Committee on Poverty Alleviation was created to contribute to national and international efforts to prevent, alleviate, and reduce poverty, particularly where it is more acute, as well as to formulate related national and international policies.
http://www.unctad.org/en/subsites/povall/pamain.htm

World Aquaculture Society (WAS)
WAS was founded to improve communication and information exchange among aquaculture interest groups.
http://was.org/main/FrameMain.asp

World Food Program (WFP)
Established in 1963, WFP is the United Nations' frontline agency in the fight against global hunger. In 2000, WFP fed 83 million people in 83 countries, including most of the world's refugees and internally displaced people.
http://www.wfp.org

U.S. GOVERNMENT ASSISTS GHANA POLICE IN COMMUNITY POLICING TRAINING

The U.S. Government, through the International Criminal Investigative Training Assistance Program (ICITAP) of the Department of Justice, provided assistance to the Ghana Police Force through a Community Policing Project. ICITAP assisted the GPS in incorporating community policing practices into its police operations and its police academy curriculum in order to promote strong crime prevention partnerships between the police and the public.

As part of the Community Policing Project, ICITAP donated 23 police mountain bicycles to the Ghana Police Service. From June 10-15, 2002, five police officers received training in repairs and maintenance of the bicycles. From June 17-21, 20 officers took part in a bicycle patrol course. At the end of the course, these officers were assigned to patrol communities throughout Accra.

ICITAP also conducted a community policing course from June 17- 21and July 8-12, 2002, for 50 police officers who were selected throughout the country. This course covered the concepts of community policing, with a focus on how to form a partnership between the police and the community in order to solve crimes and provide a safer environment.

Since 1999, ICITAP has trained over 800 officers of the GPS. The training programs include courses in human dignity and civil disorder management for line and mid-level officers. There was a two-day course for senior police officers in human dignity, creating effective standard operating procedures and civil order management. ICITAP has also conducted a riot simulation at the Police Training College and officially donated the equipment used in the training to the GPS. Other training programs ICITAP has provided to the GPS are basic criminal investigation, sex crime investigation and media relations.

The Community Police Project training provided by ICITAP is valued over $100,000.

Photos:** (Above), Participants in the bike patrol training program demonstrate their newly-aquired skills. (Below left), The Community Policing Program team.*

FAREWELL TO BROOKS ANN ROBINSON, PUBLIC AFFAIRS SECTION

Pictures: *LEFT: (From left), Mahama Ayariga, Irene Nyantakyi-Owusu) and Brooks Robinson (PAO); during her send off party at the end of her five-year duty tour in Ghana. (Above), Ms. Sadia Chinery-Hesse, member, FIDA and Nii Sarpei Nunoo, Cultural Affairs Assistant, Public Affairs Section of the U.S. Embassy.*

Pictures: *(Right), the Adinkra Project.*

(Below left): From left, Hon. Nana Akufo-Addo, Minister of Justice and Attorney General, Mr. Nutifafa Kuenyehia, Chairman, National Media Commission; and Hon. John Mahama, Member of Parliament. (Right), Mr. Sule Mahama, Naa Yeboah, Prof. Gyimah Boadi, Mr. William Yeboah.

Mr. Kwaku Sakyi-Addo, correspondent, Reuters International, Mrs. Akosua Adomako-Ampofo, Lecturer, Institute of African Studies, Legon, and Ms. Judith Agyemang, Chief Executive, Kapital Radio.

Above:- *(from left), Victor Bannerman-Chedid, Janet Owusu and Elizabeth Amissah, all of the Public Affairs Section, U.S. Embassy.*
Right:- *Mr. Emile Short, Commissioner, Commission on Human Rights and Administrative Justice and Johanna Odonkor-Swanikier.*
Below:- *(From left), Mr. Dominic Ayine, Lecturer, faculty of law, University of Ghana Legon; Dr. Audrey Gadzekpo, Snr. Lecturer, School of Communication Studies, Legon; and Mr. Yaw Boaben Asamoa, Executive Director, Ghana Integrity Initiative.*

BRIEFS *from...*

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KEY CONTACTS AND INTERNET SITES

UNITED STATES GOVERNMENT

U.S. Department of Agriculture (USDA)
14th and Independence Avenue, N.W.
Washington, D.C. 20250 U.S.A.
Key telephone numbers and Internet sites:

Animal and Plant Health Inspection Service (APHIS)
Biotechnology and Scientific Services
Biotechnology Evaluation
Telephone: (202) 720-2511
http://www.aphis.usda.gov/biotech/
http://www.aphis.usda.gov/biotech/usda_biotech.html
http://www.aphis.usda.gov/biotech/OECD/usregs.htm

Foreign Agricultural Service (FAS)
Telephone: (202) 720-7115
http://www.fas.usda.gov/

Food Safety and Inspection Service (FSIS)
Telephone: (202) 720-7943
http://www.fsis.usda.gov/

USDA Biotechnology Information Center
http://www.nal.usda.gov/bic/

USDA and Biotechnology
http://www.usda.gov/news/bioqa.htm

Ag Biotechnology Patents and New Technologies
http://www.nal.usda.gov/bic/Biotech_Patents/

Biotech-Related WWW Sites and Documents
http://www.nal.usda.gov/bic/www.html

U.S. DEPARTMENT OF COMMERCE

International Trade Administration (ITA)
Herbert Clark Hoover Building
14th Street and Constitution Avenue, N.W.
Washington, D.C. 20230 U.S.A.
Telephone: (202) 482-2867
http://www.ita.doc.gov/gmo/

U.S. Department of Energy (DOE)
Office of Biological and Environmental Research
And Office of Science
Germantown, Maryland 20974 U.S.A.
Telephone: (301) 903-5805
http://www.er.doe.gov/production/ober/ober_top.html

Oak Ridge National Laboratory
Center for Biotechnology
http://www.ornl.gov/cbt/cbt.htm

U.S. Department of Health and Human Services (HHS)
Food and Drug Administration (FDA)
Center for Food Safety and Applied Nutrition
200 C Street, S.W.
Washington, D.C. 20204 U.S.A.
Telephone: (202) 205-4943
http://vm.cfsan.fda.gov/~lrd/biotechm.html

National Center for Biotechnology Information
National Library of Medicine
National Institutes of Health
http://www.ncbi.nlm.nih.gov/

United States Department of State
Office of International Information Programs
301 4th Street, S.W.
Washington, D.C. 20547 U.S.A.
Global Issues: Biotechnology
http://www.usia.gov/topical/global/biotech

U.S. Environmental Protection Agency (EPA)
401 M Street, S.W.
Washington, D.C. 20460-0003 U.S.A.
Telephone: (202) 260-6900
TSCA Biotechnology Program
http://www.epa.gov/opptintr/biotech/index.html

Office of the U.S. Trade Representative (USTR)
Winder Building
600 17th Street, N.W.
Washington, D.C. 20508 U.S.A.
Telephone: (202) 395-3230

U.S. Regulation of Products Derived from Biotechnology
http://www.ustr.gov/reports/bioreg.pdf

NON-UNITED STATES GOVERNMENT

Consultative Group on International Agricultural Research (CGIAR)
The World Bank
1818 H Street, N.W.
Washington, D.C. 20433 U.S.A.
Telephone: (202) 473-8951
Fax: (202) 473-8110
E-mail: cgiar@cgiar.org
http://www.cgiar.org/
http://www.cgiar.org/cgnas.htm

20Codex Alimentarius Commission
http://www.fao.org/WAICENT/FAOINFO?ECONOMIC/ESN/codex/default.htm

Convention on Biological Diversity
http://www.biodiv.org

European Commission
Science, Research and Development (Biotechnology)
http://europa.eu.int/comm/dg12/biot1.html

Organization for Economic Cooperation and Development (OECD)
http://www.oecd.org/ehs/service.htm

Part I: Biotechnology and Medical Innovation: Socio-economic Assessment of the Technology, the Potential and the Products
http://www.oecd.org/dsti/sti/s_t/biotech/prod/e_97-205.htm

Part II: Biotechnology, Medical Innovation and the Economy: The Key Relationships
http://www.oecd.org/dsti/s_t/biotech/prod/e_98-8.htm

Modern Biotechnology and the OECD
http://www.oecd.org/publications/Pol_brief/9903-eng.pdf

Links to Other Biotechnology or Biosafety Resources on the Web
http://www.oecd.org/ehs/biolinks.htm

United Nations Food and Agriculture Organization (FAO)
http://www.fao.org

FAO and the Biosafety Protocol to the Convention on Biological Diversity
http://www.fao.org/WAICENT/faoinfo/sustdev/RTdirect/rtre0034.htm

Biotechnology and Food Safety
http://www.fao.org/waicent/faoinfo/economic/esn/biotech/tabconts.htm

ACADEMIC AND RESEARCH ORGANIZATIONS

Academic Information: Biotechnology
http://www.academicinfo.net/biotech.html

Agricultural Biotechnology Support Project
Michigan State University
http://www.iia.msu.edu/absp/

Biotechnology and Biological Sciences Research Council
http://www.cc.bbsrc.ac.uk/

Center for Agricultural Biotechnology
University of Maryland
http://www.umbi.umd.edu/~cab/

Center for Food and Nutrition Policy
Georgetown University
http://www.ceresnet.org

International Centre for Genetic Engineering and Biotechnology
Trieste, Italy
http://www.icgeb.trieste.it/

National Agricultural Biotechnology Council
Cornell University
http://www.cals.cornell.edu:80/extension/nabc/

National Biotechnology Information Facility
New Mexico State University
http://www.nbif.org/indxbdy.html

University of Florida
Biotechnology Resources
http://gnv.ifas.ufl.edu/www/agator/htm/biotek.htm

Virtual Center of Biotechnology for the Americas
Universidad Nacional Autonoma de Mexico
http://www.ibt.unam.mx/virtual.cgi

CONSUMER GROUPS AND INDUSTRY

Alliance for Bio-Integrity
http://www.bio-integrity.org

American Crop Protection Association
Biotechnology Committee
http://www.acpa.org/public/issues/biotech/committee.html

Biotechnology Industry Organization
http://www.bio.org/welcome.html

International Food Information Council
http://ificinfo.health.org/foodbiotech/whatexpertssay.htm

Biotechnology
Union of Concerned Scientists
http://www.ucsusa.org/agriculture/biotech.html

Biotechnology in Scotland
http://www.sebiotech.org.uk/

National Biotechnology Information Facility
Web Pages Linked to NBIF
http://www.nbif.org/About_NBIF/linksto.html

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